For Your Benefit

State of Michigan Employees Volume 3 2004

This issue provides a variety of timely information related to your health care benefits and your health care needs.

Inside this issue – **Focus on hearing care:**

Blue Cross Blue Shield Blue Care Network of Michigan

Nonprofit corporations and independent licensees of the Blue Cross and Blue Shield Association

Let's hear it for the ear

From the roaring boom of a cannon to a child's whisper, your ears instantly bring the sounds of your world to life.

The ear is one of the smallest and complex organs in the body. It's in charge of collecting sounds, processing them, and sending sound signals to the brain. There are three sections in the ear: outer ear, middle ear and inner ear. All three sections work together to process sounds.

The outer ear: Catch the wave

The outer ear is called the auricle. This is the visible part of the ear. The main job of the outer ear is to collect sounds.

The middle ear: Good vibrations

After sound waves enter the outer ear, they travel through the ear canal and make their way to the middle ear. The middle ear contains the eardrum, a thin piece of skin that stretches across the ear canal. The eardrum transforms the sound waves into vibrations.

When the eardrum vibrates, it moves three tiny bones in the ear. These bones are called the hammer (malleus), anvil (incus), and stirrup (stapes). They help sound move along on its journey into the inner ear.

The inner ear: Signals to the brain

The vibrations then travel to the cochlea, which is filled with liquid and lined with cells that have thousands of tiny hairs on their surfaces. The sound vibrations make the tiny hairs move. The hairs then change the sound vibrations into nerve signals, so the brain can interpret the sound.

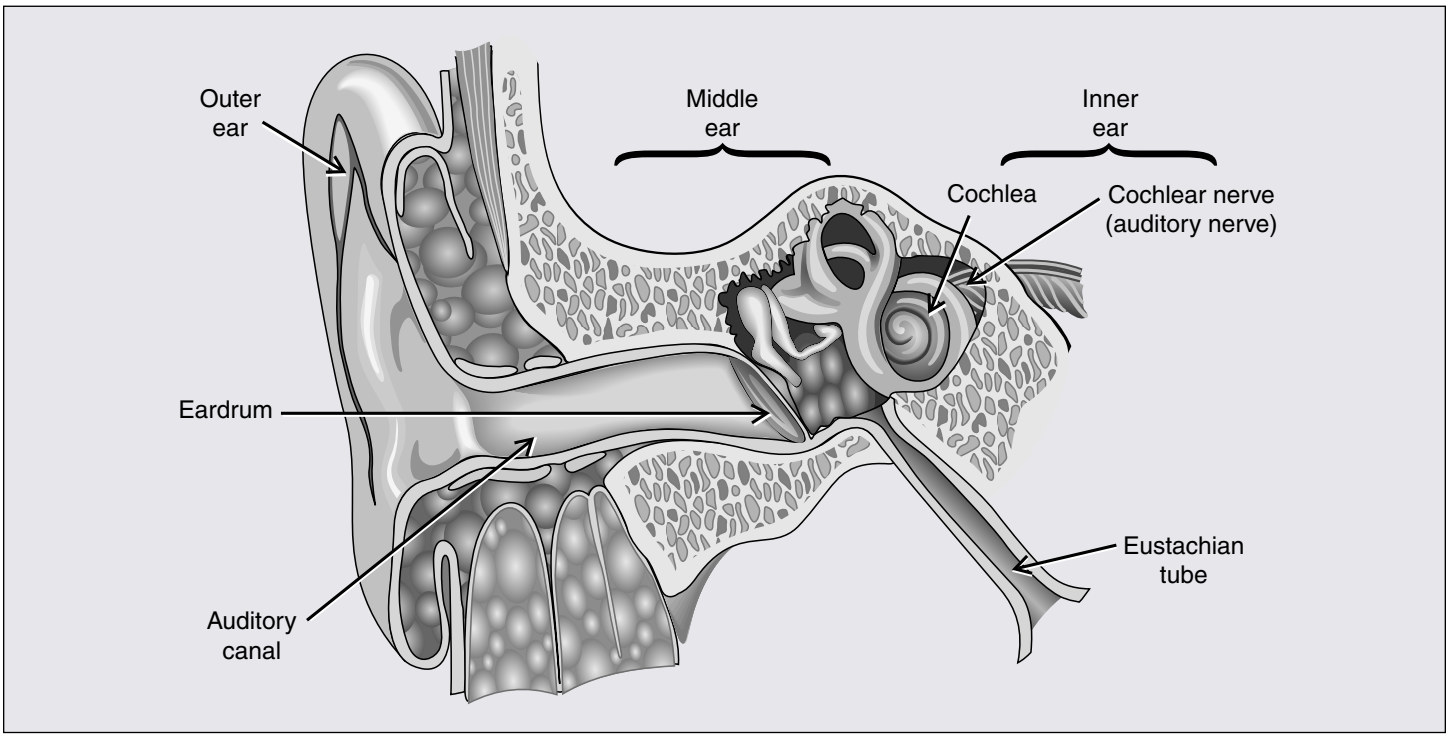
As the impulses reach the brain, we experience the sensation of hearing.

Now, I know that was quite an earful, but the next time you hear the leaves rustle or the crunch of the snow beneath your feet, you can appreciate the miracle that brings you that sound.

What's earwax?

The outer ear also includes the ear canal, where wax is produced. Earwax contains chemicals that fight off infections that could hurt the skin inside the ear canal. It also collects dirt to help keep the ear canal clean.

Never attempt to dig out excessive or hardened earwax with items such as a paper clip, a cotton swab or a hairpin. You may push the wax further into your ear and do serious damage to the lining of your ear canal and even to your eardrum. See your doctor instead.



Source: Mayo Foundation for Medical Education and Research, American Deafness and Rehabilitation Association

What's an ear specialist?

You want to get your hearing tested. Where do you start? Begin by seeing your family doctor or primary care physician. Your doctor can perform a basic exam to determine if there are any conditions that may cause a hearing loss, such as wax or fluid in your ear. Your doctor may refer you to an ear specialist for further evaluation.

Ear specialists

An ear specialist is a professional who is dedicated to the treatment of the ear and its diseases. The specialists include:

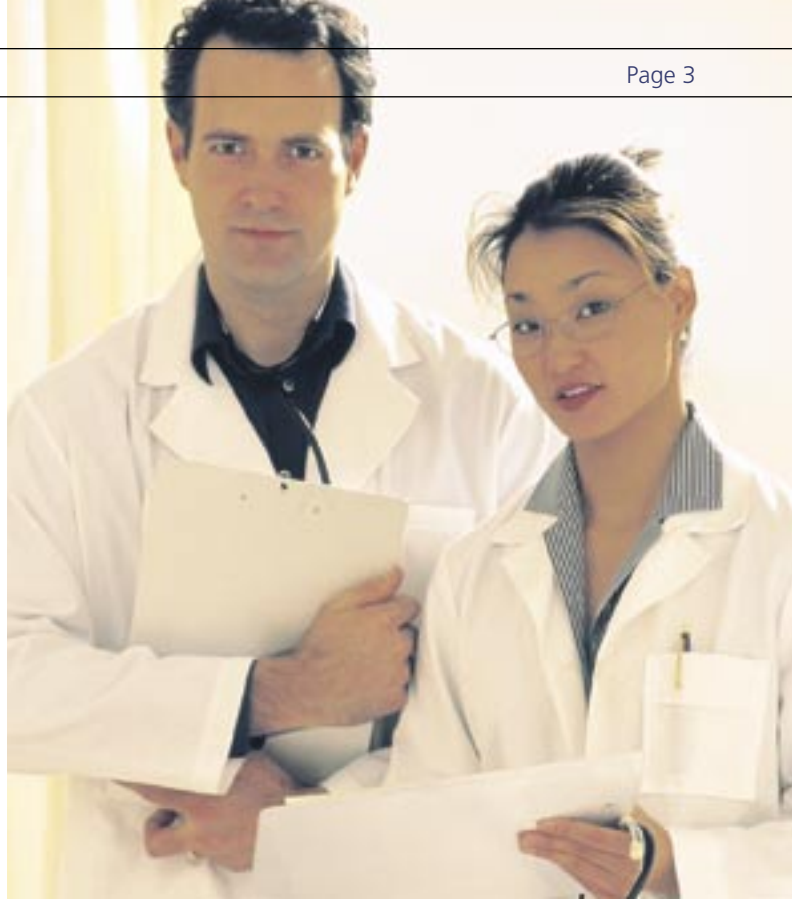
- **Otologists —** A medical physician who treats diseases of the ear
- **Otolaryngologist/otorhinolaryngologist —** A medical physician who treats disorders of the ear, nose and throat (ENT) and related structures of the head and neck. They have special expertise in managing diseases of the ears, nose and nasal passage sinuses, larynx (voice box), oral cavity and upper pharynx (mouth and throat), as well as neck and face structures.

These hearing specialists can give you a more detailed exam of your ears and hearing. They will make sure that your hearing loss isn't caused by a condition that may be treated by medical or surgical means.

These ear specialists may then refer you to an audiologist for a complete hearing evaluation.

An **audiologist** is a professional trained in all non-medical aspects of hearing impairment. This includes prevention, evaluation and treatment of the hearing and balance systems. Most hearing problems don't require medical or surgical intervention. Audiologists are clinically, academically and professionally trained to determine which hearing losses do need medical referral. As a licensed health care provider, the audiologist appropriately refers patients to physicians when the history, physical presentation, or the results of the audiometric evaluation indicate the possibility of a medical or surgical problem. An audiologist can determine:

- The presence of hearing loss
- The degree and type of hearing loss



- The nature of associated communication problems
- Whether a hearing aid, or assistive device is needed
- Which type of hearing aid would potentially offer the greatest benefit

In addition, the audiologist can provide instruction in:

- Group or individual hearing rehabilitation (including hearing aid orientation and usage)
- Speech reading
- Auditory training (listening training)
- Communicative strategies
- Telephone use
- Patient or family counseling
- In-service training or consultation

Many audiologists also dispense (sell and service) hearing aids and related assistive listening devices for the telephone, TV and special listening situations, or they may refer you to a hearing aid dealer or fitter.

So now that you know who's who in the world of ear-specialists, you'll know who to contact when the need arises.

Source: American Academy of Audiology, American Academy of Otolaryngology-Head and Neck Surgery Alexandria, VA

Safe sound

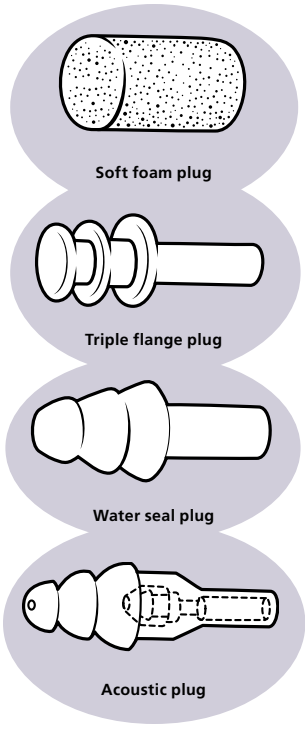
People don't think twice about getting their eyes examined on a regular basis, readily purchasing glasses or contact lenses if necessary, and yet they frequently neglect to take care of their ears. There are steps you can take to keep your hearing up to par.

Is that too loud?

One way to reduce hearing damage is by paying attention to noise levels and realizing when they're too high. As a general rule, noise may damage your hearing if:

- You have to shout over background noise to make yourself heard
- The noise hurts your ears
- It makes your ears ring
- You have difficulty hearing for several hours after exposure to the noise.

According to the United States Safety and Health Standards, workers shouldn't be exposed to more than 90 decibels over a period of eight hours. If you work in a noisy environment, check out the decibel level you're being exposed to, and take the proper precautions. Turn down the volume, or remove yourself from the noisy area when possible. Afterwards, give your ears a rest for 24 hours after exposure to dangerous levels of noise, and get some hearing protection.



How to protect your hearing

A variety of ear protection devices is available today. Over-the-counter **earplugs** can be purchased at most drugstores and shooting supply stores. They range from foam to rubber, silicone and wax. They're affordable, comfortable, disposable, and provide important help in reducing the dangers of exposure to excessive levels of noise.

Earmuffs fit over the entire outer ear to form an air seal so the entire ear canal is blocked. Earmuffs are held in place by an adjustable band. However, they will not seal around eyeglasses or long hair, and the adjustable headband tension must be enough to hold earmuffs firmly around the ear.

Even if earplugs or muffs are worn continuously while in noise, they won't do much good if there isn't a complete air seal between the hearing protector and your skin. If you're using the protectors appropriately, you should be able to hear your own voice louder and deeper with them on than without them.

Properly fitted earplugs or muffs reduce noise 15 to 30 decibels. Earplugs are better for low frequency noise and earmuffs for high frequency noise. Using earplugs and muffs usually adds 10 to 15 decibels *more* protection than either used alone. Use both of them when the noise level exceeds 105 decibels.

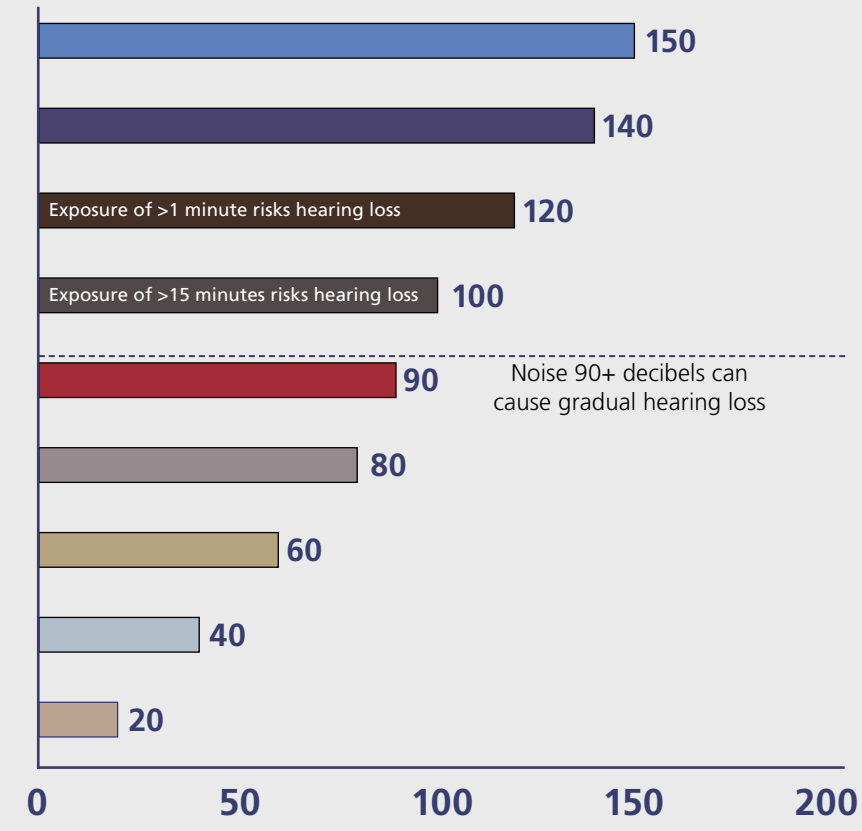
If you have experienced some hearing loss, wearing either one or two **hearing aids** in the ear(s) is the most widely-known assistance. In the past, vanity was undoubtedly a leading reason for some people to choose not to wear a hearing aid. With today's technology, though, there are now many different types of hearing aids on the market that can be inconspicuously worn in your ear(s).

Having your hearing tested is another way to help prevent hearing loss. By detecting any problems early, your hearing loss, if any, can be kept to a minimum.

Sources: Hearing Education and Awareness for Rockers, House Ear Institute

How loud is too loud?

Know which noises can damage your hearing



- Jet take-off
- Rock concert, firecracker, gun shot
- Car stereo, snowmobile, band practice
- Wood shop, factory
- Lawn mower, motorcycle, subway
- City traffic noise
- Normal conversation
- Refrigerator humming
- Whispered voice

Sources: Hearing Education and Awareness for Rockers, House Ear Institute

Do you hear what I hear?

Your answer to these 10 questions can determine if you have a hearing problem.

1. Do you have a problem hearing over the telephone?

   YES NO

2. Do you have trouble following the conversation when two or more people are talking at the same time?

   YES NO

3. Do people complain that you turn the TV volume up too high?

   YES NO

4. Do you have to strain to understand conversation?

   YES NO

5. Do you have trouble hearing in a noisy background?

   YES NO

6. Do you find yourself asking people to repeat themselves?

   YES NO

7. Do many people you talk to seem to mumble (or not speak clearly)?

   YES NO

8. Do you misunderstand what others are saying and respond inappropriately?

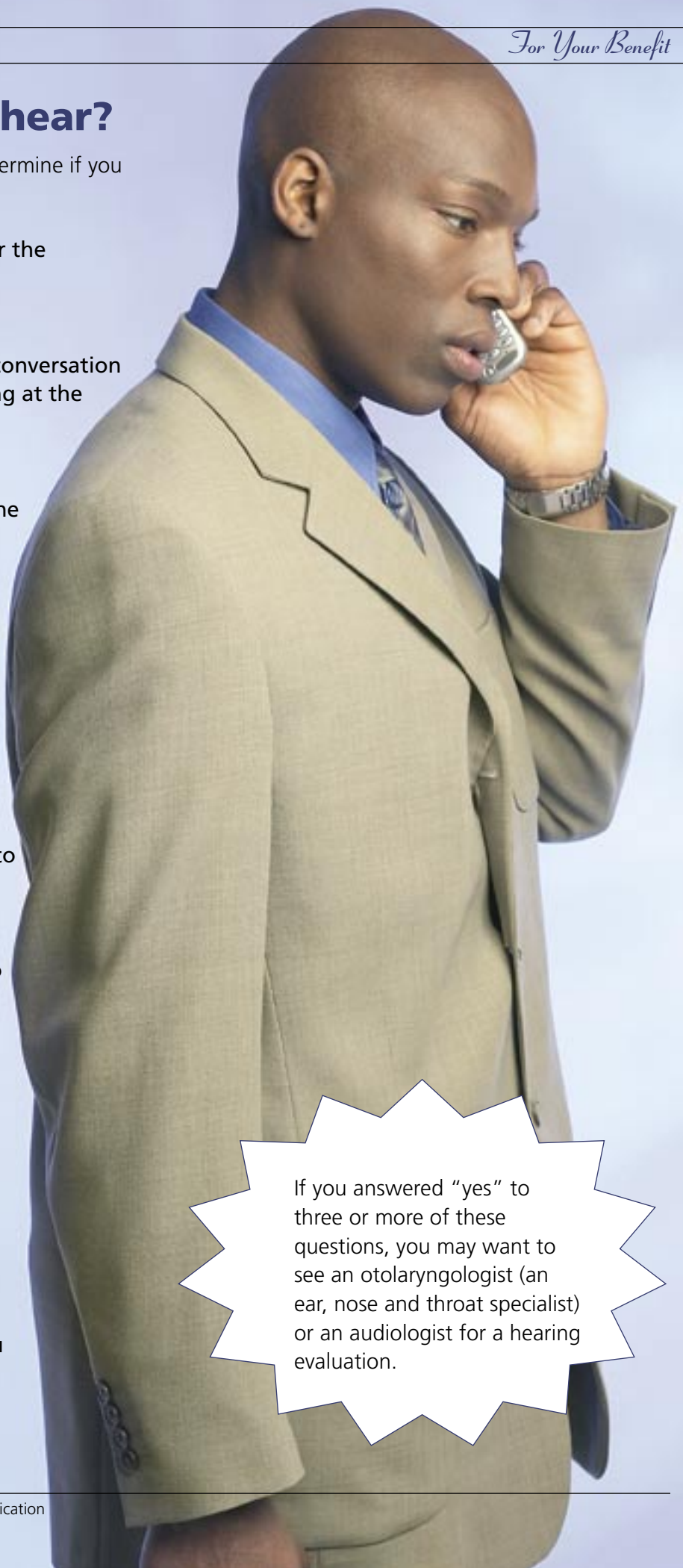
   YES NO

9. Do you have trouble understanding the speech of women and children?

   YES NO

10. Do people get annoyed because you misunderstand what they say?

    YES NO



If you answered "yes" to three or more of these questions, you may want to see an otolaryngologist (an ear, nose and throat specialist) or an audiologist for a hearing evaluation.

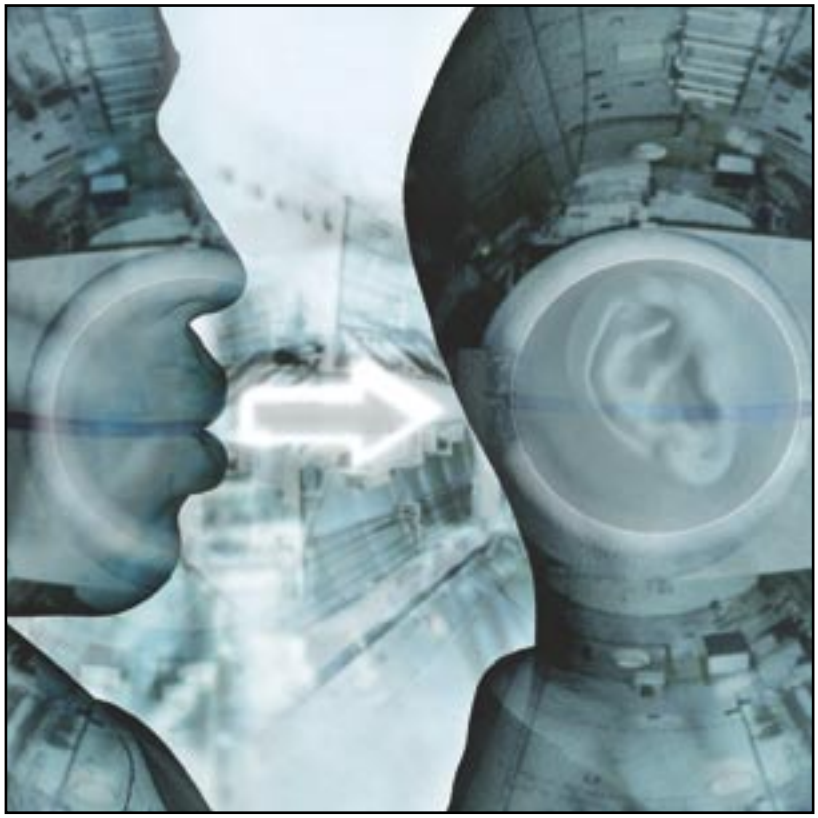
Source: National Institute on Deafness and Other Communication Disorders, National Institutes of Health

"Can you hear me now?"

It may be a humorous commercial, but not being able to hear isn't so funny in real life. About ten percent of Americans, that's over 30 million people, experience some form of hearing loss. That makes it the third most common chronic health condition, after arthritis and high blood pressure. Surprisingly, minor hearing loss is normal after age 20. Hearing loss negatively impacts quality of life, personal relationships and of course, your ability to communicate.

There are two types of hearing loss; conductive loss and sensory-neural loss.

Conductive hearing loss



The loudness of perceived sound is reduced when sound isn't conducted efficiently through the ear canal, eardrum or tiny bones of the middle ear. Conductive hearing loss can be the result of ear infections, impacted wax, fluid in the ear, ear infection, or a punctured eardrum.

A person with conductive hearing loss may notice their ears seem to be full or plugged. This person may speak softly because they hear their own voice loudly. Crunchy foods, such as celery or carrots, seem very loud and this person may have to stop chewing to hear what is being said.

To demonstrate a conductive hearing loss, stick your fingers in your ears. You'll feel plugged-up, and a little hearing impaired. Assuming you have normal hearing, when you plug your ears with your fingers, you'll experience approximately a 25 decibel hearing loss. Imagine experiencing that all of the time. Fortunately, this type of hearing loss is reversible, meaning that the hearing could return on its own, or be corrected by surgery or medicine.

Sensory-neural hearing loss

Sensory-neural loss occurs when the sound waves that reach the inner ear are not properly converted into messages that can be passed to brain. Also known as nerve deafness, this type of hearing loss involves the deterioration of the inner ear. The tiny hairs that line the ear passage, and which carry sound, are damaged. This occurs in two hearing disorders: **central auditory processing disorder (CAPD)** (see the article on CAPD on pg. 8) and **presbycusis**. Presbycusis is an age-related hearing loss due to the natural changes or hereditary factors that occur in the ear of a person as he or she ages.

Sensory-neural hearing loss is most commonly caused by long exposure to loud noises, bacterial and viral infections, fluid build-up, sudden trauma to the head or ear, and common childhood diseases such as measles. It's also part of the normal aging process. People with such loss generally hear low-pitched tones better than high-pitched tones. Sounds are often distorted. Sensory-neural hearing loss cannot be treated with medication or surgery, and damage is permanent. Hearing aids are the best treatment.

If you suspect any of these conditions, talk to your family physician or primary care physician. He or she may refer you to an ear specialist for a comprehensive exam. Hearing is essential to fully enjoying your life. Keep yours in check.

Sources: The Nemours Foundation, American Speech-Language-Hearing Foundation

CAPD: short circuits in the wiring

You ask the new clerk to help you rearrange the supply area. As you explain how to organize the materials, he interrupts you to ask quite a few questions in a louder than normal voice.

He sorts the materials, but stops often to ask you to repeat your instructions. You give me some last minute suggestions, but he didn't seem to notice. Instead of ***stacking*** *the empty boxes, he* ***packed*** *them.*

What's wrong with him?

Maybe it was just lack of motivation or interest, or maybe it ***is*** *a hearing impairment* — a central auditory processing disorder.

What is CAPD?

A central auditory processing disorder (CAPD) is a physical hearing impairment that doesn't show up as a hearing loss on routine screenings or an audiogram. That's because it affects the hearing system beyond the ear. The ear's job is to separate a meaningful message from background sound and deliver that information to the brain. However, with CAPD, the message is distorted or incomplete and the afflicted person may not respond appropriately. People with CAPD typically can hear normally, but have problems in analyzing or making sense of what they hear.

CAPD in children

In children, auditory problems may be identified by:

- Having speech and language problems
- Having a poor attention
- Constantly humming or self-talking

Children may also have difficulty in:

- Following directions
- Expressing themselves
- Listening and reading comprehension
- Social interactions

Children who have a history of ear infections or chronic middle ear fluid are at a higher risk for having difficulties in auditory perception and processing. Other causes of CAPD in both children and adults include head traumas and lead poisoning as well as hereditary and neurological dysfunctions.

Adults with CAPD

Adults with CAPD may have a problem with:

- Retaining auditory information
- Inattentiveness
- Sound sensitivity
- Speech/language and voice abilities

For individuals with CAPD, these problems may result in:

- Talking louder than normal
- Confusing similar-sounding words
- Interpreting words too literally
- Difficulty following directions in a series
- Often needing remarks repeated
- Developing speech late or unclearly
- Difficulty sounding out words
- Communicating poorly (curt, telegraphic)
- Ignoring people, especially if engrossed
- Poor memorization
- Being unusually sensitive to sounds
- Hearing better when watching the speaker
- Asking extra informational questions
- Problems with rapid speech

CAPD *continued on page 9*

CAPD *continued from page 8*

Coping with CAPD

CAPD is a physical disorder under the protection of the Americans with Disabilities Act. After an accurate diagnosis has been made, here are ways to work with the problem to enable you or someone you know to attain his or her potential.

Problem	Reason	Solution
Has trouble hearing clearly when it's noisy	Failure of the automatic noise-suppression system(s) of the brain	Move to where it's less noisy. Use a mild-gain amplifier to hear more accurately on the phone.
Makes "silly" mistakes or "careless" errors	Intrusions of random sounds, which normal-hearing people can ignore, that may break concentration. The hearing-impaired person could lose his or her place and skip a task (like carrying a number or writing a small word in the sentence)	Work in a quieter place if necessary. Earplugs (sometimes in only one ear) are a possible short-term solution. Have someone else check the work.
Misses important sounds or signals that others easily hear	Poor noise suppression and sound localization skills cause voices or signals to "disappear" in the general background	Make sure the person can see the speaker. Adjust telephone bells and alarms for pitch or volume, or use a visual or tactile signal.
Gets important messages wrong	Sound distortion, sequencing, auditory-visual transfer, and/or short term memory problems	Get the information in writing, double check it with someone else. Ask the speaker to slow down. Repeat the information back to the speaker to confirm it.
Forgets instructions	Inefficient short-term auditory and memory	Take notes; set up a log for longer assignments; ask that the information be put in a memo. Use a small tape recorder.
Can't comprehend complex directions or lengthy explanations	Problem with language subtleties; difficulty forming rapid "word pictures" to help form concepts and memories	Get written or taped information and analyze the information later.
Has difficulty knowing "what to say when" and are puzzled by others' reactions	Unable to register expression in the voice that enables a "quick comeback" in verbal situations	Learn cues to "read" how people are feeling about what you said and how to change what you say accordingly (as someone would do in learning about a foreign culture).

With environmental modifications and much determination, children and adults with CAPD can live a full life.

Sources: Judith W. Paton, M. A., Audiologist; Department Of Communication Disorders & Deafness, Kean University, Union, New Jersey; Bridges4Kids, Okemos, Michigan; Center for Hearing and Deafness Research

Ear infections — a common pain in children

Children have ear infections all of the time. But what's the cause? And how do you treat the infection?

Three out of four children experience an ear infection, known as otitis media, by the time they are three years old. In fact, ear infections are the most common illness in babies and young children. Some kids are particularly susceptible because of environmental and lifestyle factors. Some of these risk factors are:

- Exposure to frequent colds in day care
- Secondhand tobacco smoke
- Taking a bottle or a pacifier to bed
- Family history

Types of ear infections

There are two main types of ear infections: acute otitis media (AOM) and otitis media with fluid (OME). AOM is the initial ear infection, when parts of the ear are infected and swollen, and fluid and mucus are trapped inside. It can be extremely painful. OME occurs after the infection is gone, but fluid and mucus stay trapped in the ear. This fluid can affect a child's hearing.

How ear infections happen

A child develops an ear infection when viruses or bacteria get inside the ear and cause an infection. It often happens because of allergies or an illness, such as a cold. It's harder for children to fight illness than it is for adults, so children develop ear infections more often.

An ear infection may last two days or two weeks. There may be improvement within 48 hours even without treatment. Treatment with antibiotics for a week to 10 days is usually effective. Even after antibiotic treatment, fluid may stay in the middle ear for up to two months. In most children, the ear infection clears up after the antibiotic treatment.

Ear infection can affect hearing

An ear infection not only causes severe pain, but also may result in serious complications if it isn't treated. An untreated infection can travel from the middle ear to the nearby parts of the head, including the brain. Although the hearing loss caused by the infection is usually temporary, an untreated ear infection may lead to permanent hearing impairment. Too much fluid in the ear can put pressure on the eardrum and eventually tear it. Keeping fluid in the middle ear with chronic ear infections can reduce a child's hearing at a time that's critical for speech and language development. Children who have early hearing impairment from frequent ear infections are likely to have speech and language disabilities.

Permanent hearing loss is rare from an ear infection, but a child needs to visit the doctor if you suspect he or she has one.

Ear infections *continued on page 11*

Signs of hearing loss in children

Hearing loss is the single most common birth "defect" in America. If your child exhibits one or more of the following signs have your child's hearing checked:

- Your child's baby talk isn't progressing and remains monotonous.
- Your child has difficulty locating sounds.
- Your child isn't startled by loud sounds.
- Your child's ability to produce and understand spoken language is delayed for their age.
- Your child daydreams and withdraws in social situations.
- Your child has frequent ear infections.

These signs don't necessarily mean that your child has a hearing problem, but it's best to be sure when it comes to your little one.

Source: League for the Hard of Hearing

Ear infections *continued from page 10*

Treatment

The doctor will examine your child's ear. Antibiotics may be the first course of treatment for bacterial ear infections. However, many ear infections are viral and cannot be treated with antibiotics. These infections need to get better on their own, and only time can help them heal. If a child is experiencing pain, the physician may also recommend a pain reliever. Over-the-counter cold medicines (decongestants and antihistamines) should be avoided because they don't help ear infections. As always, aspirin should never be given to children for pain or fever as it has been associated with Reye's syndrome, a disease that affects the liver and brain.

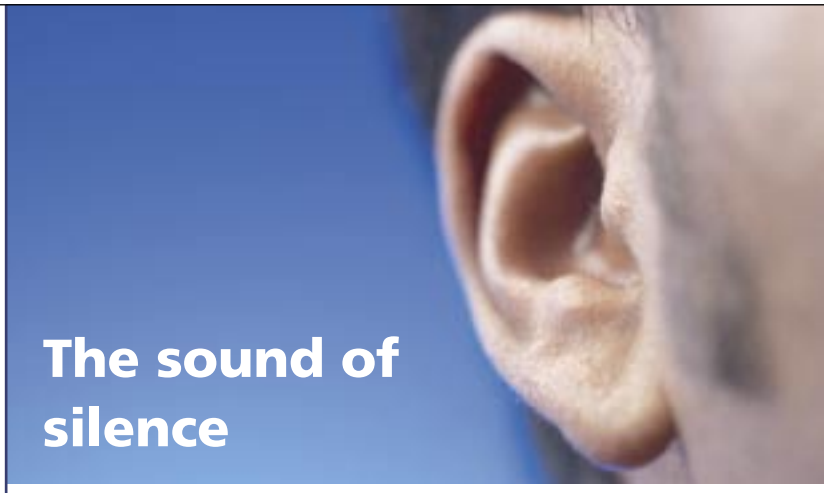
Some children with chronic ear infections need surgery. Surgery may also be suggested to drain fluid from the middle ear and insert a ventilation tube if the child has a hearing loss or speech delay. Because most children have had infections in both ears, surgery is typically done in both ears. A tiny tube is inserted into the eardrum to ventilate and equalize pressure in the middle ear. This will help to prevent infection and fluid accumulation. Hearing should be restored. Depending on the type of tube used, the tube remains in place for about six months to 18 months or more.

Prevention

Obviously, preventing an ear infection is better than trying to treat one. Limiting the risk factors is one way to prevent ear infections. You should:

- Minimize exposure to secondhand smoke
- Consider breast-feeding instead of using formula if ear infections are common in your family
- Avoid contact with children who are sick with viruses (daycare)
- Eliminate pacifier use

Although repeated ear infections are extremely frustrating, they're usually only a temporary problem. With proper care, you and your doctor can manage these infections when your child is young. Often they will stop altogether as your child gets older.



The sound of silence

It could be tinnitus

Do you hear ringing? It's tinnitus, a very common problem.

Tinnitus is a symptom associated with a variety of hearing diseases and disorders. People with tinnitus have a ringing, roaring, or hear other sounds inside the ears. The sounds may be intermittent or constant, soft or loud, and vary from a low hiss to a high-pitched tinkling. It may be subjective, being that only the patient can hear it, or objective, meaning that others can hear it, too. Whatever the sound, it affects a person's level of overall hearing.

Tinnitus is usually associated with hearing loss. In fact, in many cases, the first symptom of the hearing loss is tinnitus. It occurs when some of the hair cells, which convert sound into nerve impulses, become damaged, resulting in a faulty connection between the inner ear and the hearing nerve.

Cause and relief

It may be caused by earwax, an ear infection or another medical condition, allergies, the use of too much aspirin or certain antibiotics, loud noises, or a nerve disorder. Often, the reason for the ringing cannot be found. While there's no cure for the condition, tinnitus can come and go, or it can stop altogether on its own. Some tinnitus patients with hearing loss experience total or partial tinnitus relief while wearing hearing aids. Masking devices, which resemble hearing aids, can produce low-level sounds that can reduce and in some cases eliminate the *perception* of tinnitus. Concentration and relaxation exercises have also been used to reduce the intensity of tinnitus.

A visit to your doctor should be the first step to finding a useful and successful treatment.

For BCN members only:

Coping with chronic conditions

If you've ever been diagnosed with a chronic condition, you're probably familiar with the question, "Now what do I do?" Blue Care Network's disease management and health education programs help thousands of members answer that question.

BCN offers comprehensive programs designed in partnership with primary care physicians. Members receive educational materials, self-help tools (such as handbooks and personal care cards), newsletters and invitations to specific events. Members can also find additional information on the BCN Web site at **www.bcn.com**.

Following is a list of BCN disease management and health education programs. The disease management programs are a part of BlueHealthConnection®, a health management program to help you stay healthy, get better, or improve your quality of life while living with an illness. This umbrella of care provides members with the information, tools and assistance they need to make informed health care choices.

These services are available free of charge. For more information about BCN's disease management programs, call 1-800-392-4247.

Asthma Management Program

Teaches you how to identify and avoid personal asthma triggers and how to self-manage your condition using an Asthma Action Plan.

Cardiovascular Program

Members learn about risk factors that contribute to heart disease and stroke. Specific information on each of the risk factors (tobacco smoke, high blood pressure, high cholesterol, obesity, inactivity and diabetes) is provided to help adult members age 18 and older develop a healthy lifestyle to reduce their risk of disease.

Congestive Heart Failure Program

This program also focuses on self-management, including information about medications, diet, weight and exercise.

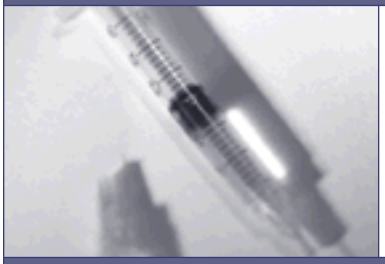
Depression Management Program

Learn about the causes of depression and treatment options: medication, therapy and self-management.

BCN *continued on page 11*

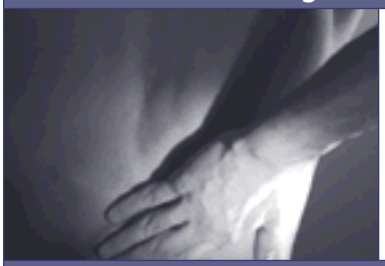
BCN *continued from page 12*

Diabetes Management Program



Learn how to control this condition through nutrition, diet, medication and regular monitoring. The program covers many recommended tests, educational tools and preventive measures to monitor your diabetes, including education classes for the self-management of diabetes. Classes require a referral from your primary care physician. The classes are located at BCN-contracted hospitals.

Low Back Pain Management Program



This program will help you better understand back pain and what you can do to prevent or reduce episodes of pain.

Migraine Management Program

Teaches members how to identify and avoid personal migraine triggers, medications, tracking the occurrence of headaches and how to talk to their practitioner about headaches.

Quit the Nic Smoking Cessation program

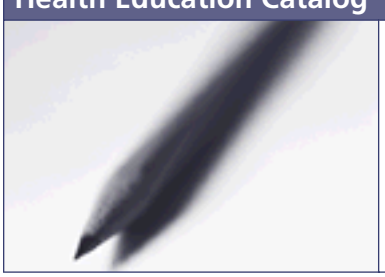
Telephone counseling — Work one-on-one with a registered nurse to develop an action plan, set a quit date and stay smoke-free for life.

Self help guides

Self-help guides can be ordered by members who choose to learn on their own. All guides are free for BCN members and can be ordered by calling 1-800-637-2972.

- Healthy approaches to menopause
- Quitting smoking for life
- Children's guide to healthy nutrition
- Taking control of your weight
- Stress management
- Hope and help for depression
- Taking control of your cholesterol
- High blood pressure

Health Education Catalog



Catalog includes community based, hospital based and BCN in-house programs offered to members and their community. Several programs listed are offered to BCN members at a discount by calling 1-800-637-2972. Programs include:

- Disease management and prevention
- Pregnancy, baby care and parenting
- Stress management
- Exercise and fitness
- Smoking cessation
- Weight management

For Your Benefit
State of Michigan Employees

Blue Cross Blue Shield of Michigan
600 E. Lafayette Blvd. — Mail Code B180 — **Newsletter return only**
Detroit, MI 48226-2998

How to reach us

For benefit information or claim inquiries, call or write the BCBSM State of Michigan Customer Service Center.

To call

1-800-843-4876

Our customer service representatives are available from 8:30 a.m. to 4:45 p.m. Monday through Friday excluding holidays.

To write

Please send all correspondence to:

State of Michigan Customer Service Center
Blue Cross Blue Shield of Michigan
P.O. Box 80380
Lansing, MI 48908-0380

For more information on hearing and hearing loss, contact:

The American Speech-Language Hearing Association at
www.asha.org

Michigan Speech-Language-Hearing Association at
www.michiganspeechhearing.org

American Academy of Audiology at
www.audiology.org

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